

Alaska After Prudhoe Bay: Prospects for the Economy

by

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**COUNCIL OF PETROLEUM ACCOUNTANTS
SOCIETY**

ANNUAL MEETING

April 23, 2009

Anchorage, Alaska

**Institute of Social and Economic Research
University of Alaska Anchorage**

How Oil Has Transformed the Alaska Economy

With Financial Support from



Structural Analysis: Where Do the \$\$s Come From?



The Alaska State Seal



Traditional Natural Resources: Seafood



SEAFOOD: 2005 LANDED VALUE (Million \$)

TOTAL	\$1,295
Salmon	\$303
Groundfish	\$660
Halibut	\$169
Shellfish	\$148
Herring	\$15



28 thousand harvesters, 39% non resident. ??? processors, 73% non resident.

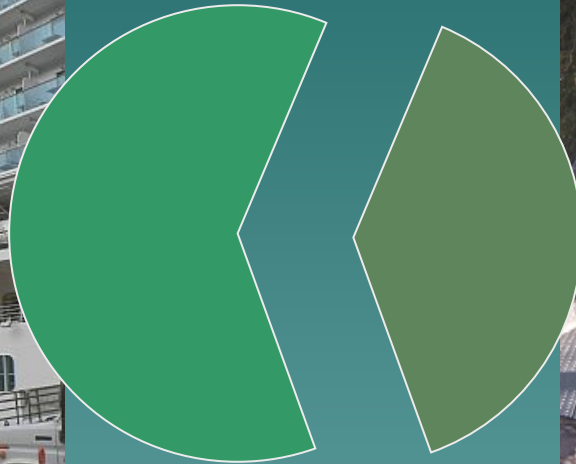
Traditional Natural Resources: Mining



Mineral Production Value (Mill \$)		
	2005	2006
Zinc	\$862	\$2,003
Gold	\$190	\$336
Lead	\$115	\$184
Silver	\$85	\$130
Copper	-	-
	\$1,253	\$2,653

Zinc is used to galvanize steel. Price went thru the roof in 2006.

New Natural Resources: Tourism



1.5 million tourists in 2006 bring \$1.5 billion \$\$\$ with them to Alaska.

New Natural Resources: Air Cargo

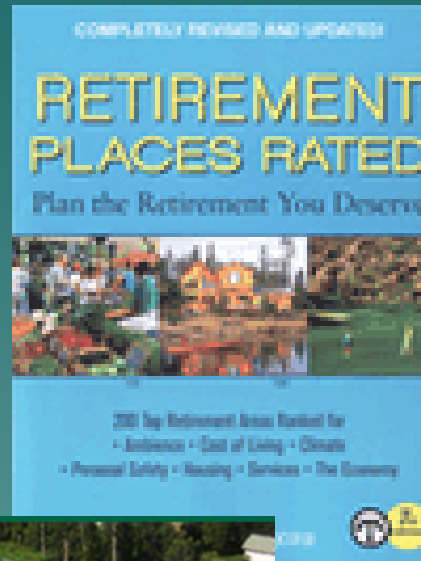
2006 CARGO TRAFFIC (Million Metric Tonnes)

Memphis	3.69
Hong Kong	3.61
Anchorage	2.80
Seoul	2.34
Tokyo	2.28



China Air alone averages 10 flights per day thru Anchorage.

New Natural Resources: Retirees

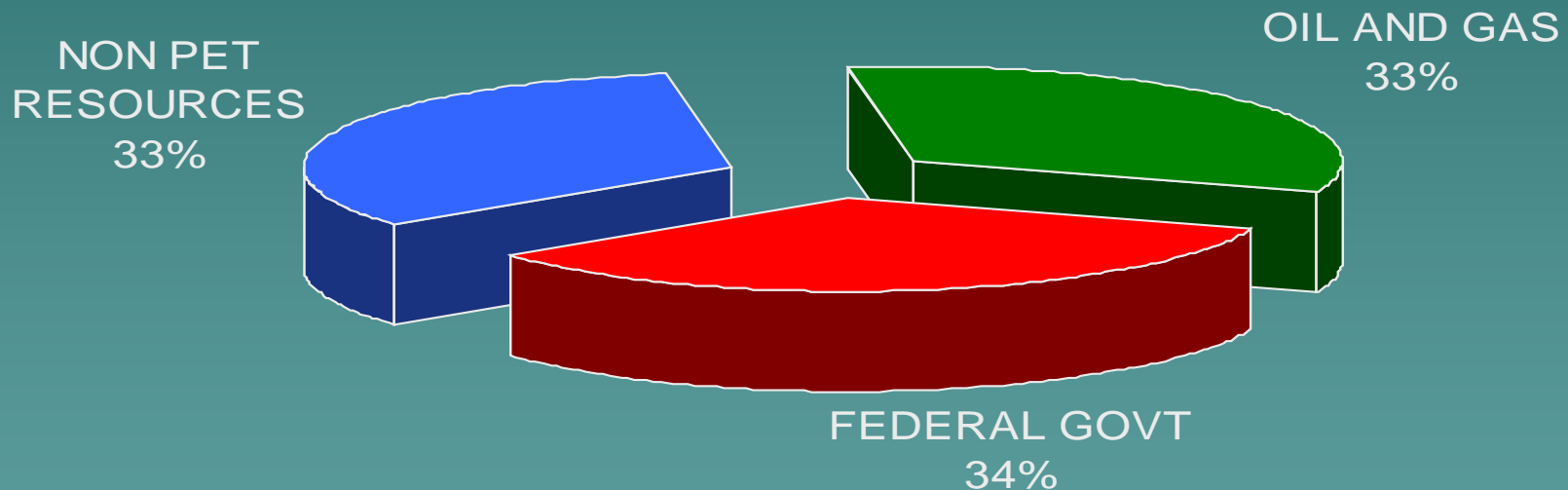


52 thousand retirees ages 60+ in 2004. \$1.5 billion of retirement and health care \$\$\$\$.

The “Updated” Alaska State Seal



Alaska Economic Drivers: The Foundation of the Economy



Shares of Personal Income in 2005

Indicators of Oil's Share of Economy

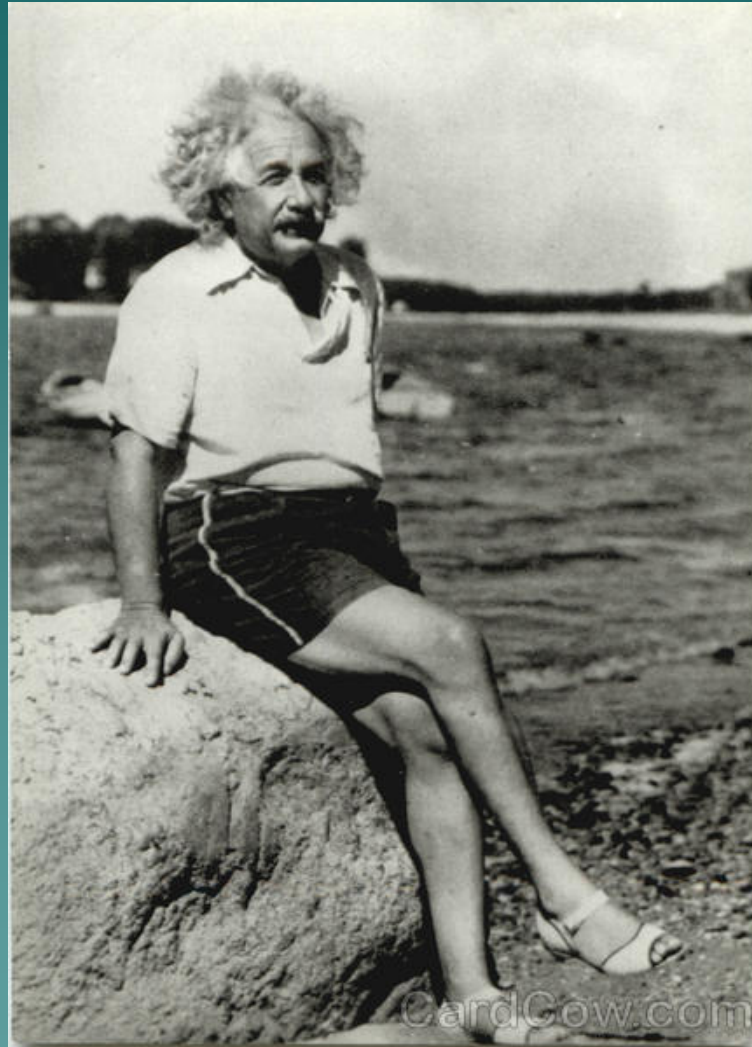
NR Production value since 1867	90%
State General Fund revenues	85%
Market value of resource production	82%
Industrial property tax base	80%
Private investment spending (Direct)	60%
Gross state product (Direct)	33%
Personal income (Total)	33%
Jobs (Total)	33%
Jobs in Oil Sector	3%

****NEW****

OIL IMPORTANCE INDICATORS

Jobs Today from Oil Production & PFD	33%
Economy Today without Oil	50%
Economic Growth since Statehood	66%
State GF Operating Revenues	100%

Gedankenexperiment



Oil and the Alaska Economy

April 1, 1968

Anchorage Daily News

ANOTHER DRY HOLE AT PRUDHOE BAY Companies Say “We Give Up”

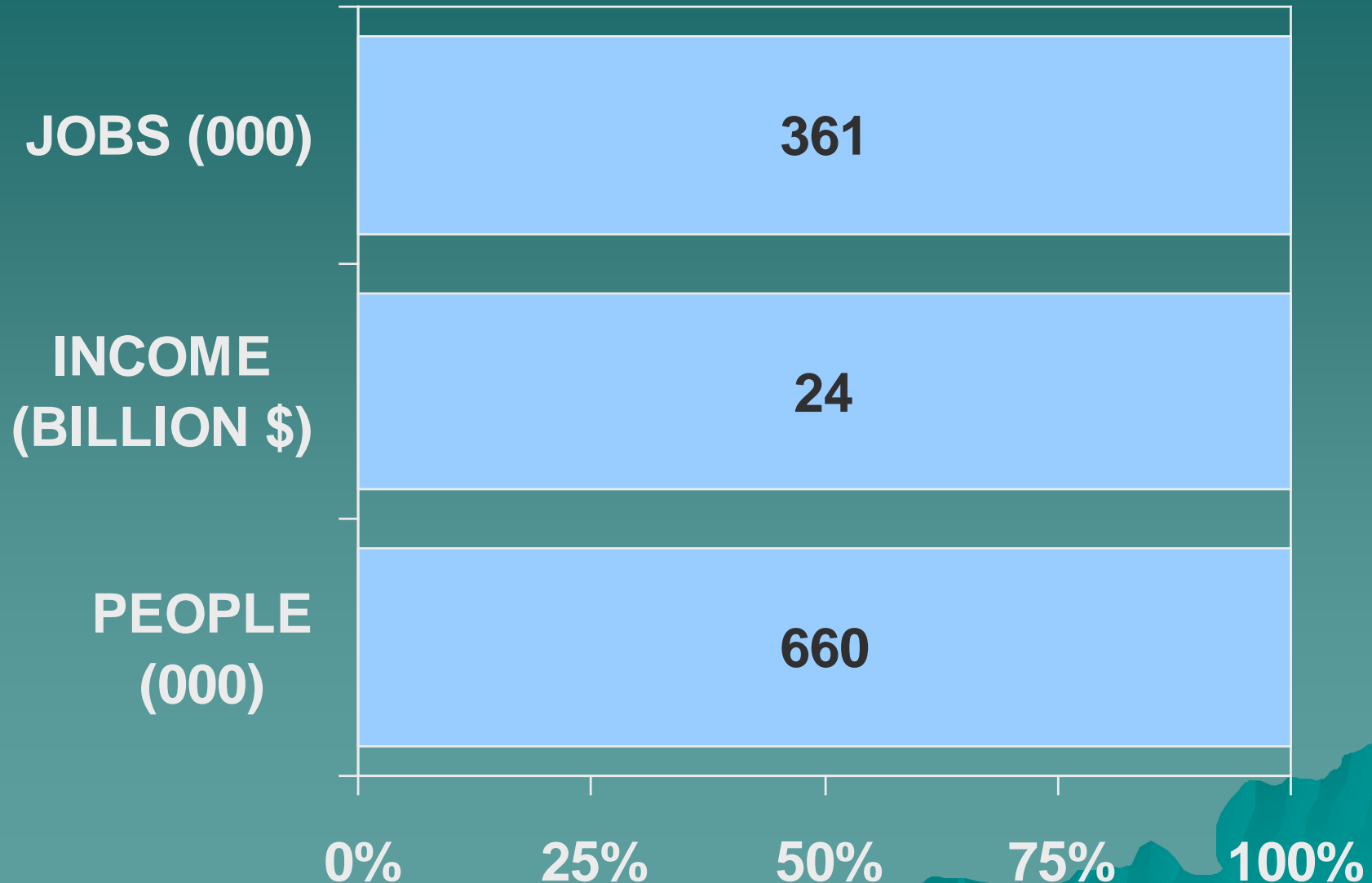
Alaska: The Road Not Taken

- I. Production Disappears
- II. Squeeze on Resource Sector
- III. Squeeze on Support Industries
- IV. Squeeze on Federal \$\$
- V. Squeeze on Retirees

A WORK IN PROGRESS



Alaska Indicators 2007



I. No Production



- Oil Patch
- Government Spending
- PF Dividend



© Rolf Hicker

I. No Production--Part 1

The Oil Patch

Job creation

- 41,744 jobs – direct, indirect, induced
 - 4,497 Direct – primary companies
 - 8,410 Indirect – support industry companies providing goods and services
 - 28,837 Induced – jobs created when direct and indirect employees spend their income locally

The Role of the Oil and Gas Industry in Alaska's Economy

Anchorage Chamber of Commerce
June 30, 2008

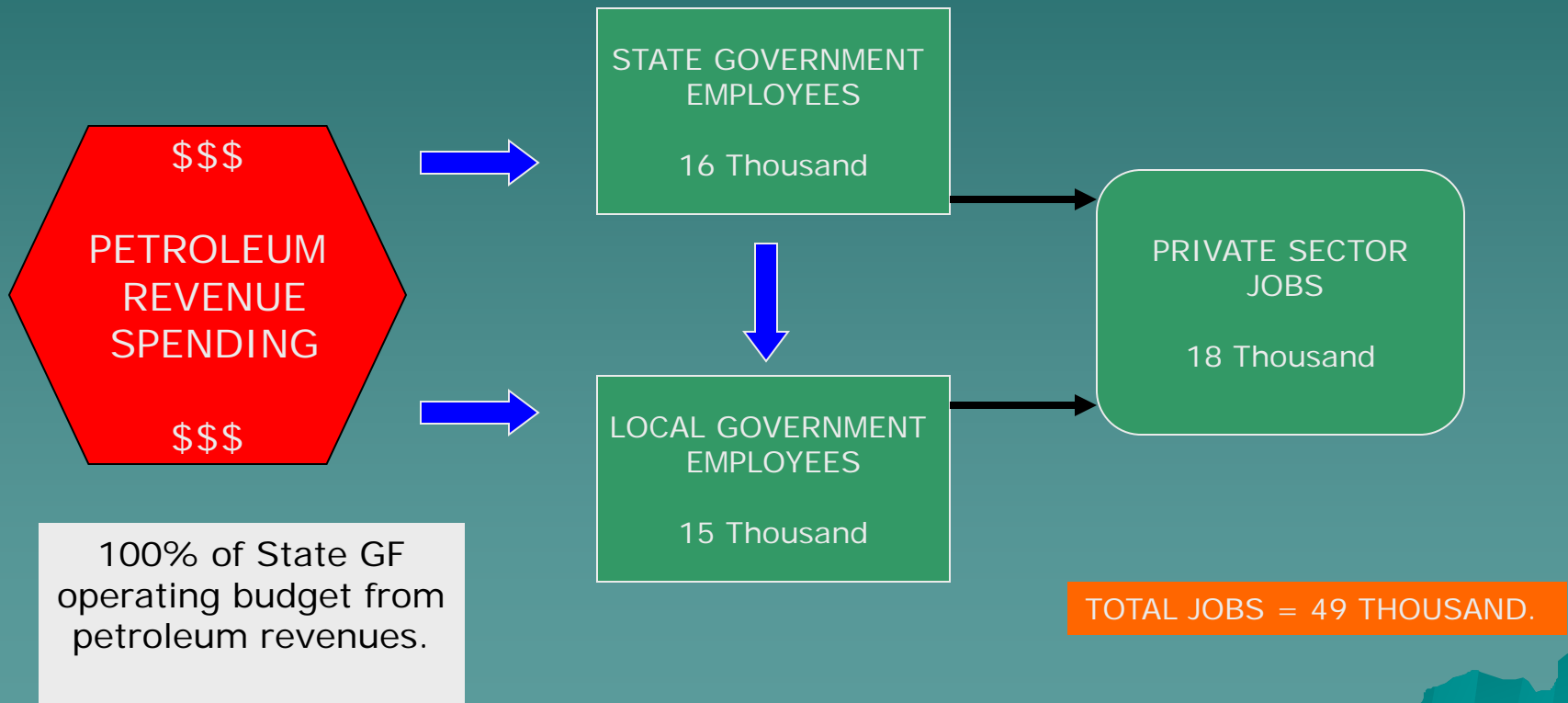
 Information Insights
Fairbanks + Anchorage

 **McDowell**
GROUP



I. No Production--Part 2

Government Spending



Assumption: All Spent Petroleum Revenues Pay for Operations.

I. No Production—Part 3

The PF Dividend

2008 DIVIDEND BASICS

\$3,269 Dividend

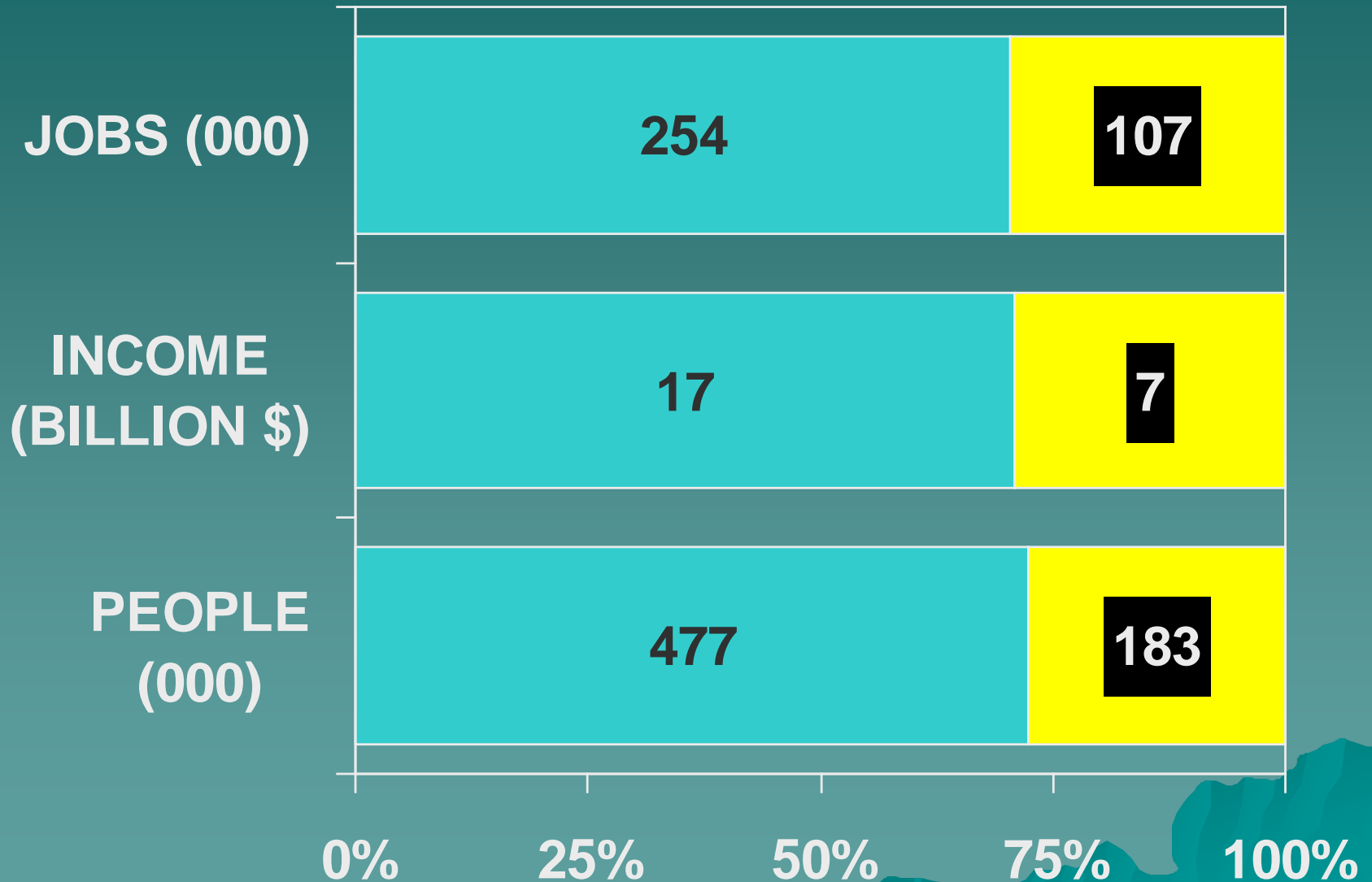
611 Thousand Recipients

\$2 Billion Distribution

COMPARE 2007 EARNINGS (Billion \$)

- ◆ \$1.4 Retail Trade
- ◆ \$1.6 Federal Civilian
- ◆ \$1.7 Construction
- ◆ \$1.8 Oil + Mining
- ◆ \$2.0 Health
- ◆ \$2.2 Military

I. Production Squeeze



Alaska with Oil: Bigger, Richer, Healthier

- ◆ Job Opportunities
- ◆ Business Opportunities
- ◆ High Incomes
- ◆ Low Taxes
- ◆ Low Prices
- ◆ New People
- ◆ Public services
- ◆ Public Infrastructure
- ◆ Business infrastructure
- ◆ Consumer goods and services

II. Resource Industry Squeeze



- Light Tax Burden
- Investment in Developmental Infrastructure
- Operations Assistance
- Support Business Development
- Lower Wages

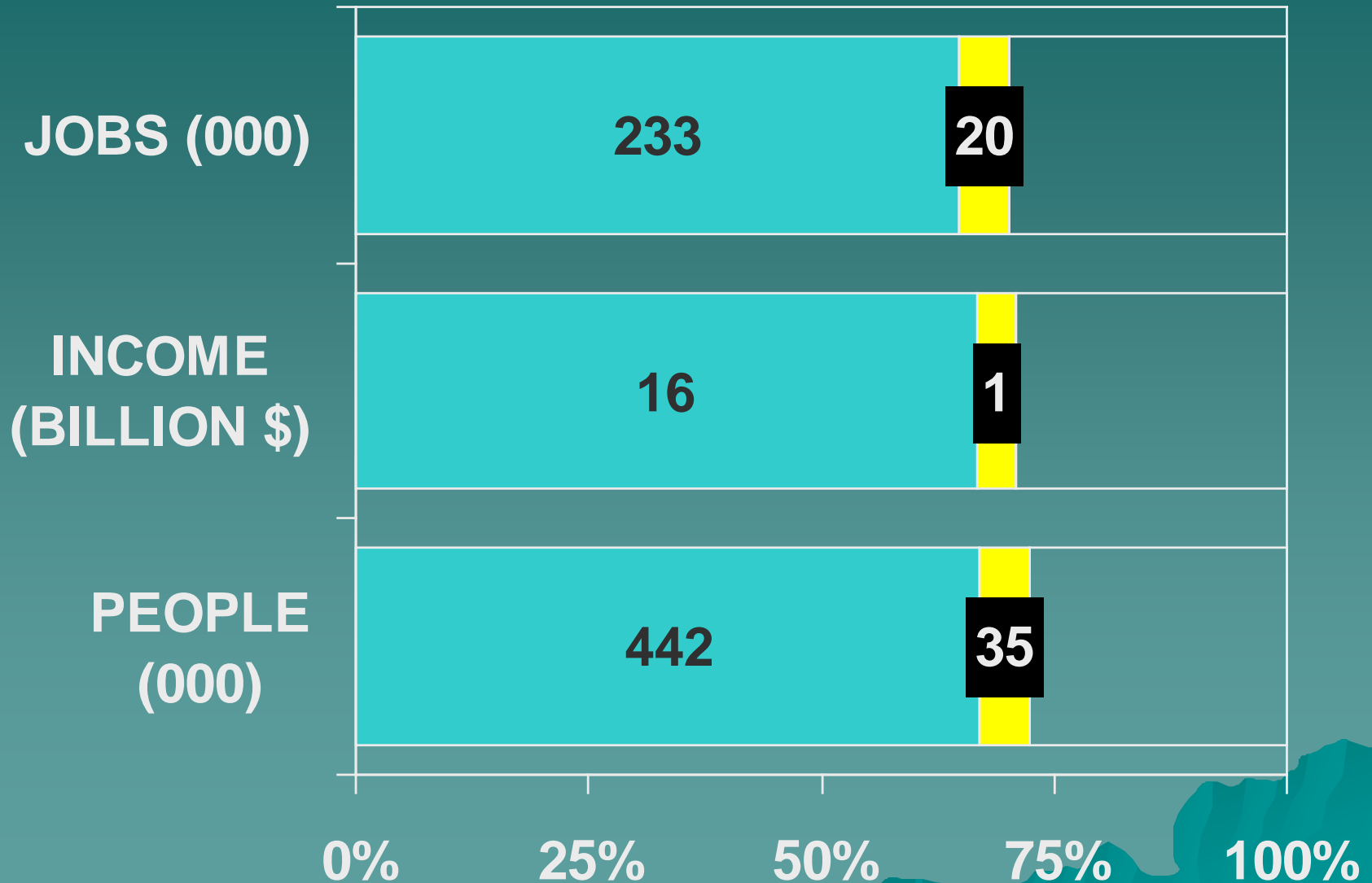
Resource Industry Squeeze: Job Growth (Thousands)

	STATE HOOD 1961	2006	Change
TOTAL	10	45	35
Tourism	1	22	21
Fishing	7	17	10
Air Cargo	-	3	3
Mining	1	2	1
Timber	1	1	-

II. Resource Industry Squeeze: Actual and Projected Tax Burden

2004 State GF Revenues (Million \$): Seafood, Tourism, Mining	
Actual	\$112
If Oil \$ Disappeared	\$502
Incremental Burden, no Oil \$	\$390
Increase in Tax Rate	4 X

II. Resource Industry Squeeze

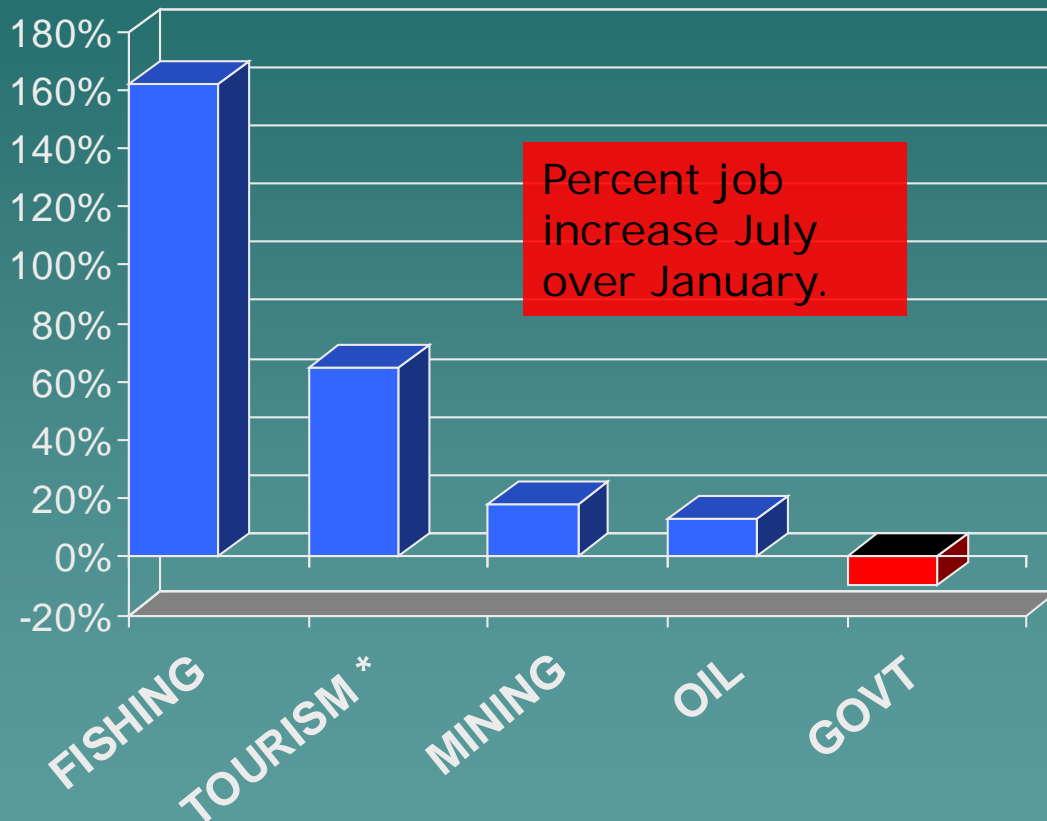


III. Support Sector Squeeze



- Light Tax Burden
- Cost of Living Decline
- Reduced Seasonality
- Support Business Development
- Lower Wages
- Economies of Scale
- Enhanced Competition

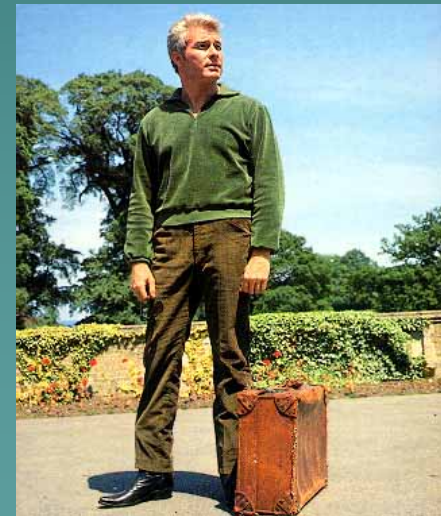
III. Support Sector Squeeze: Non Seasonal Petroleum Jobs



Ratio of July to January
Tourist Visitors is 10:1.

Index of
Seasonality

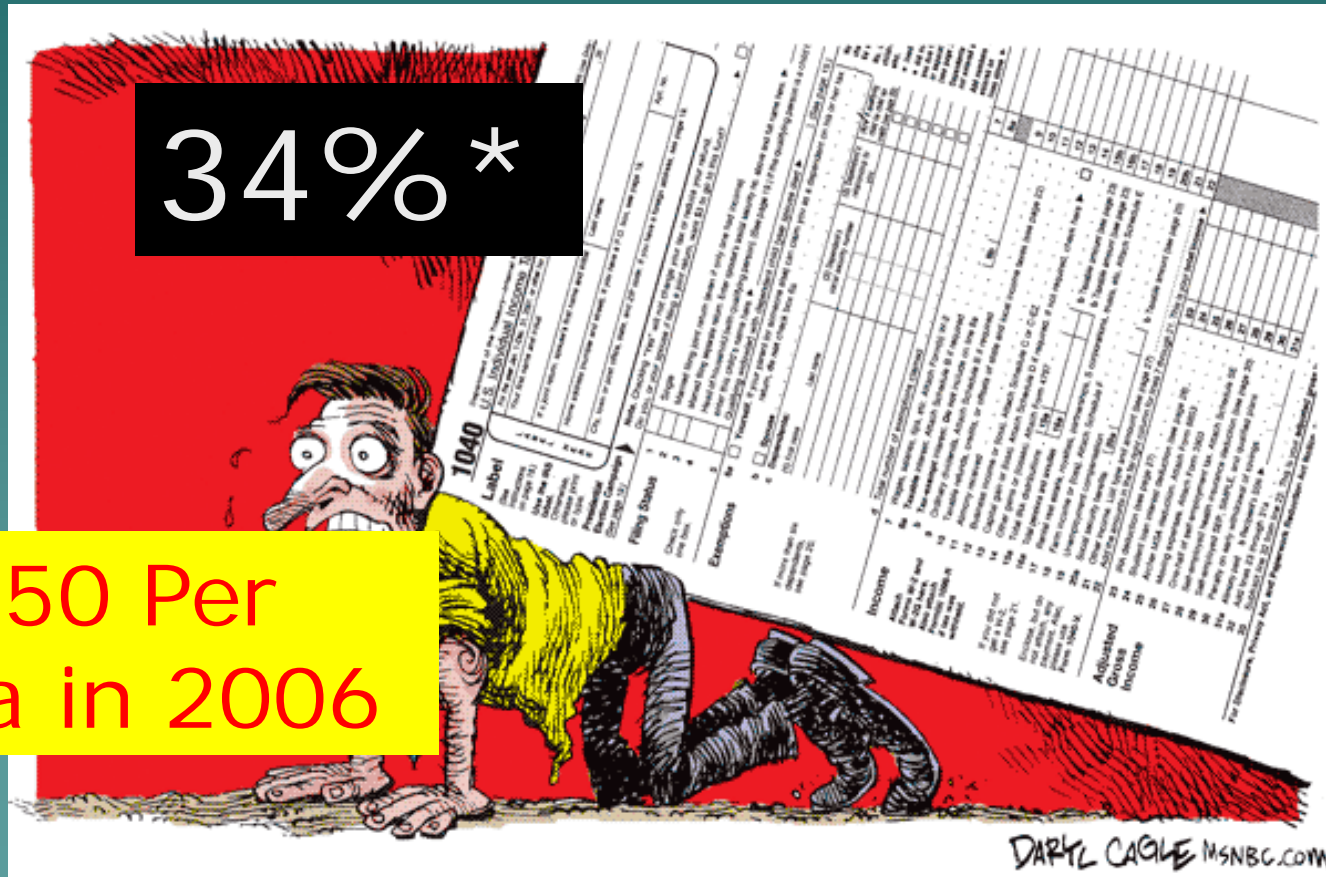
1968	32%
2006	12%



III. Support Sector Squeeze: Household Tax Burden

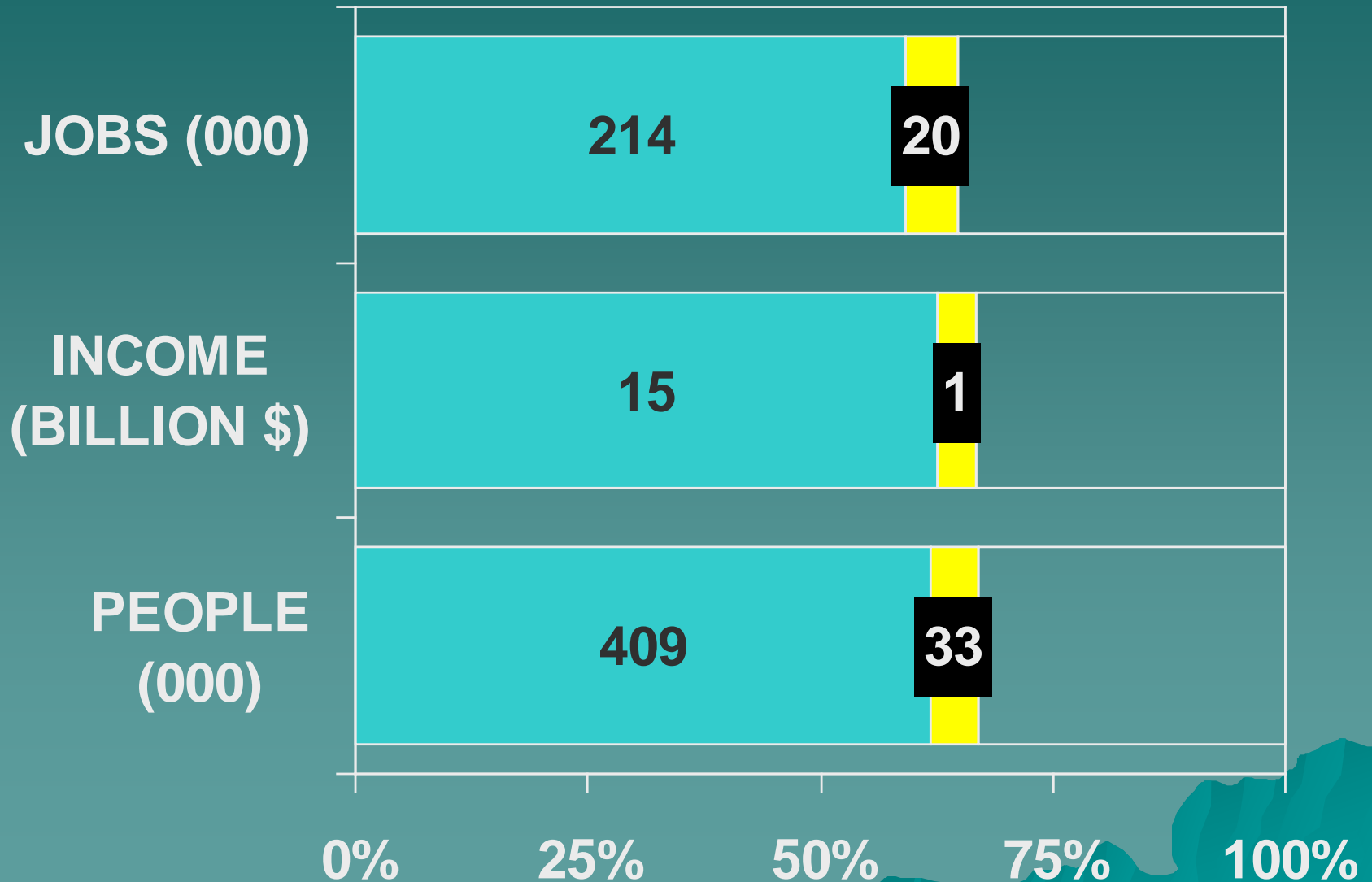
34%*

\$13,150 Per
Capita in 2006



* Average State Income Tax Rate to Replace Oil Revenues—1970 to 2006.

III. Support Sector Squeeze



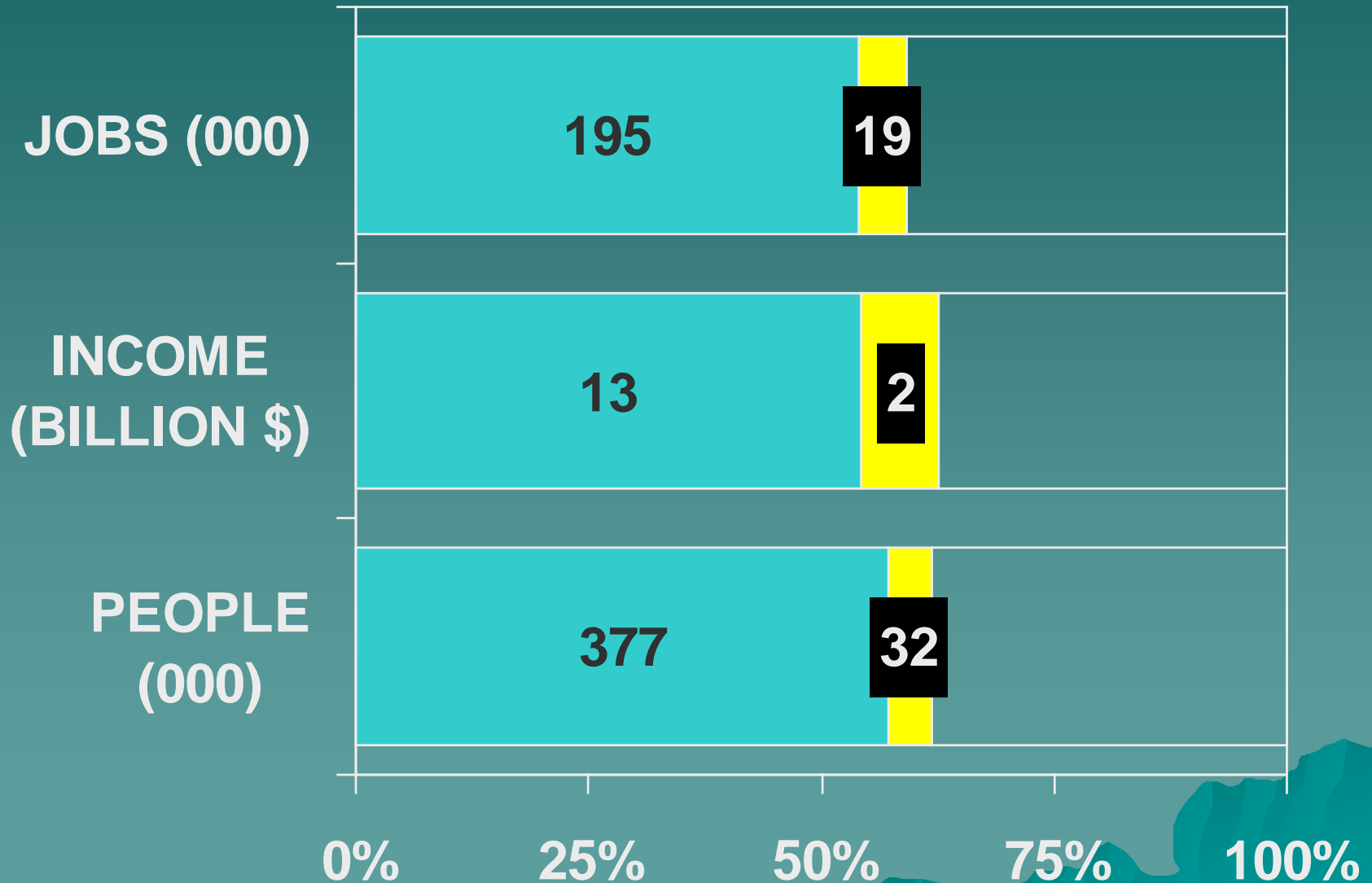
IV. Federal Dollar Squeeze



- Population Sensitive Payments

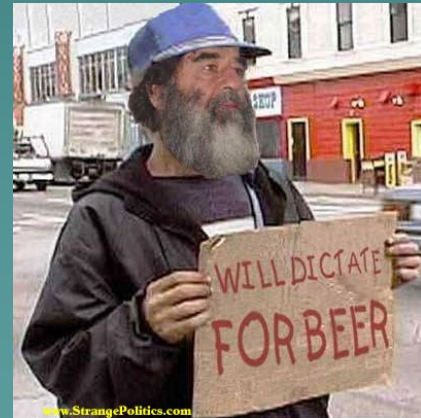


IV. Federal \$\$ Squeeze

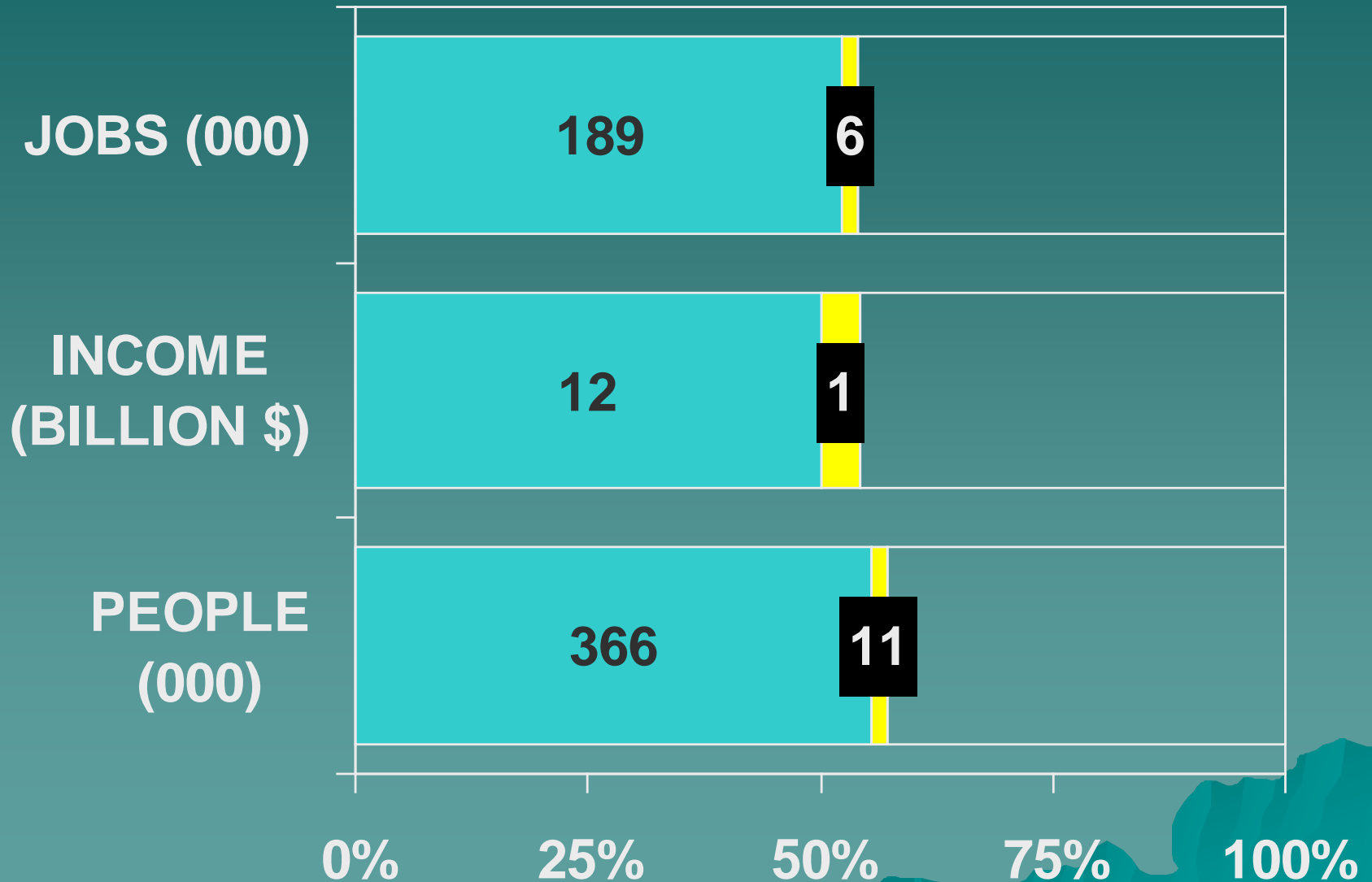


V. Retiree Squeeze

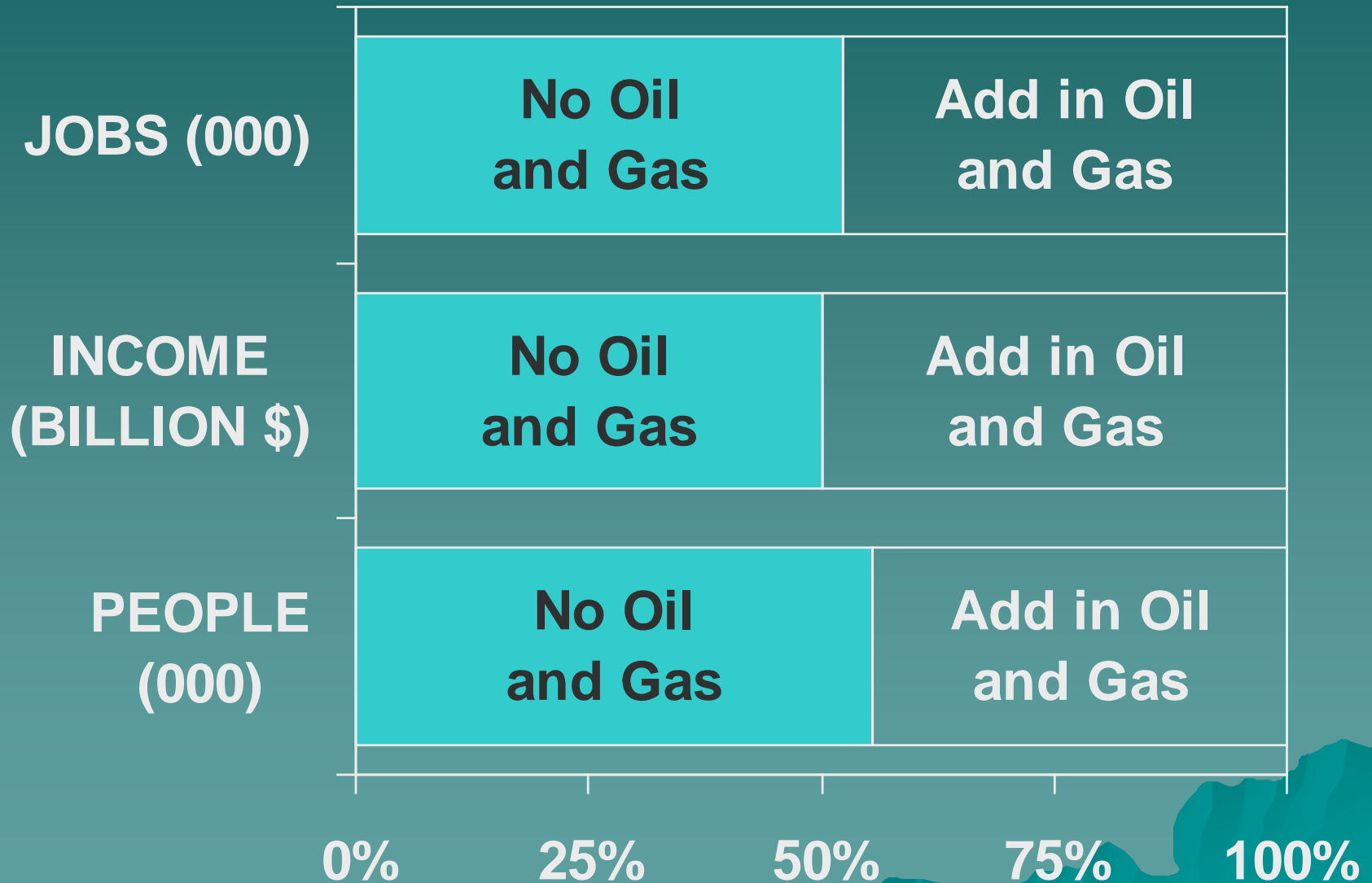
- Tax Free
- PFD
- Public Amenities



V. Retiree Squeeze



Two Contrasting Alaska Economies in 2007: Without and With Petroleum

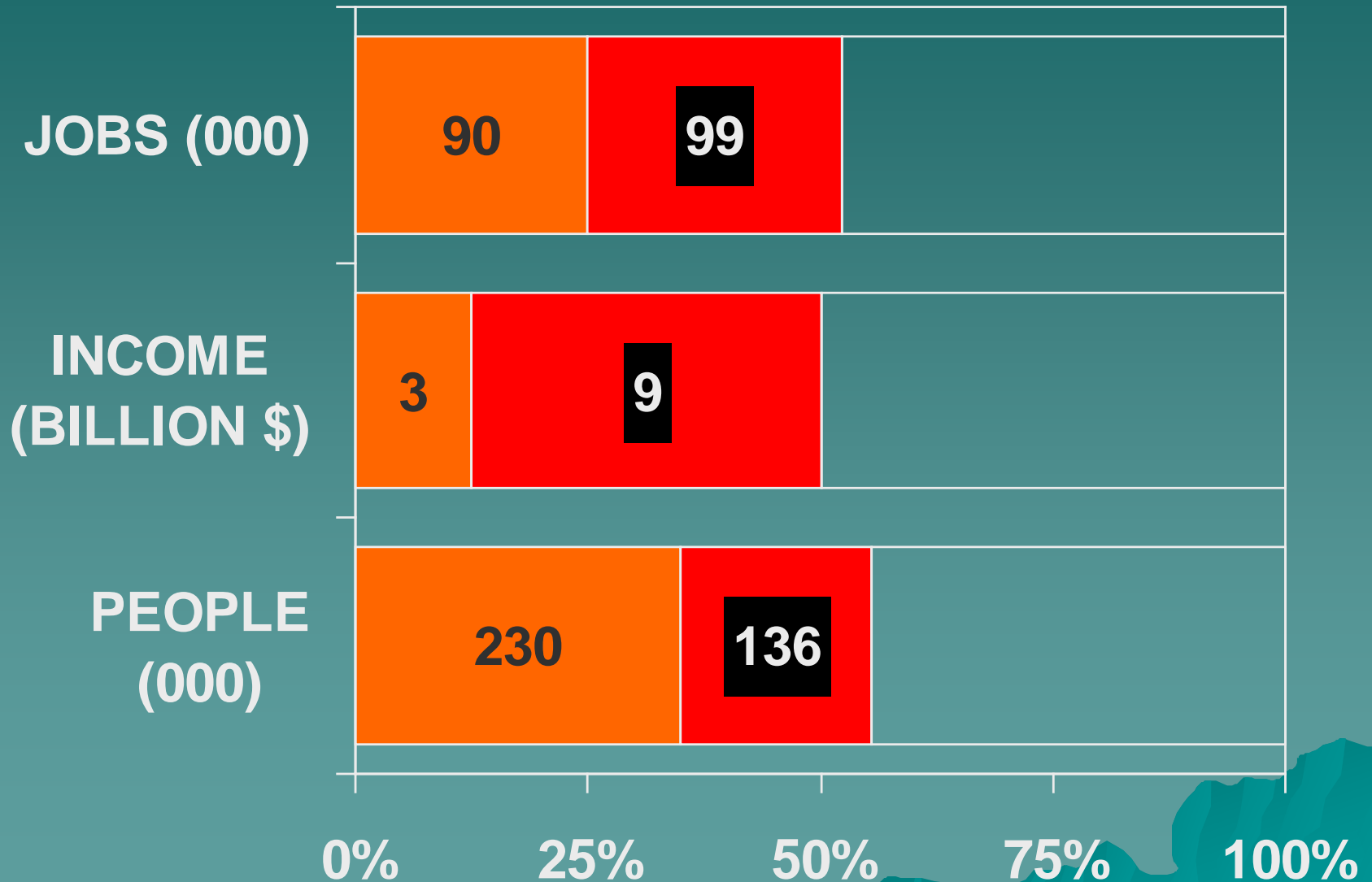


The Road Not Taken

The 1/2 Rule

The Alaska economy would be about $\frac{1}{2}$ its actual size today without the development of Petroleum industry.

The Road Not Taken: Alaska Growth Since Statehood



The Road Not Taken

The 2/3 Rule

About 2/3 of the economic growth in Alaska since Statehood can be traced to Petroleum.

The Road Not Taken: Alaska Economic Base

Military	35%
Federal Civilian	23%
Tourism	20%
Fishing	16%
Mining	3%
Air Cargo	3%
Timber	0%

Candidates for Comparison ?

- ◆ Oklahoma
- ◆ New Mexico
- ◆ South Dakota
- ◆ Wyoming
- ◆ Montana
- ◆ Idaho
- ◆ Florida
- ◆ Nevada
- ◆ Hawaii



Maine Is Not Like Alaska

- ◆ Physically attached to Lower 48
- ◆ Federal land ownership 1%
- ◆ Native American population 1%
- ◆ Lobsters instead of crabs
- ◆ Unusual accent
- ◆ Presidential hangout

Maine and Alaska

- ◆ Many moose
- ◆ Few humans
- ◆ Cold
- ◆ Remote
- ◆ Independent streak



Maine and Alaska

- ◆ Fish / Tourism / Timber / Mining / Agriculture
- ◆ Limits on sustainable harvests
- ◆ Challenged by globalization
- ◆ Small and declining manufacturing
- ◆ Dependence on federal \$\$\$s
- ◆ Conflicting visions about use of resources
- ◆ “Zero Sum Game” development mentality
- ◆ Strategic development planning advice from Brookings Institution



Maine Economic History in a Nutshell



Throughout the second half of the twentieth century, Maine has struggled to find a proper balance between resource-based industrial development and environmental protection.

The state has come to rely heavily on tourism, small manufacturing enterprises and defense-related activities and installations for much of its economic base.

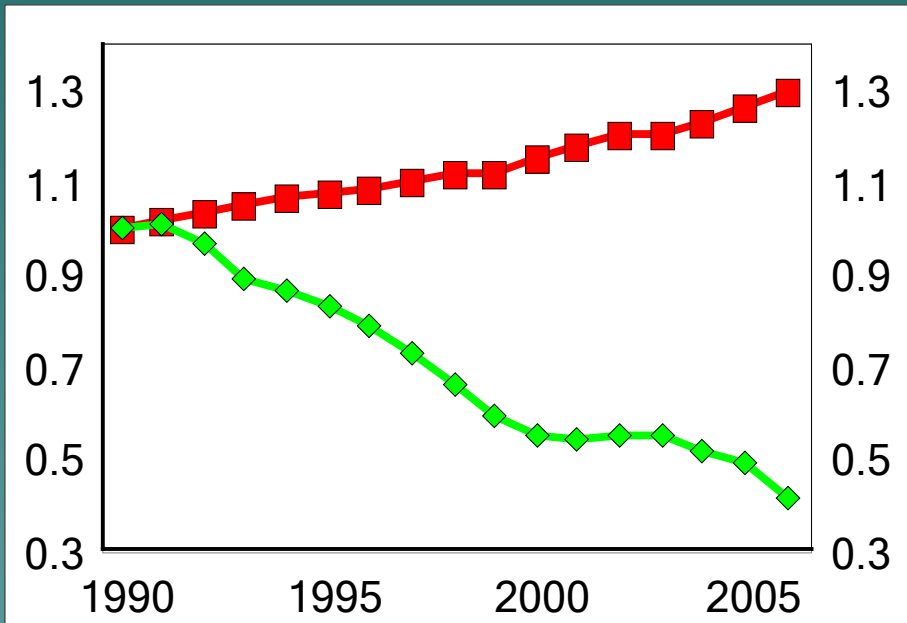
Maine Economic Performance: Some Evidence

- ◆ Gross State Product per capita: 43rd (Ak 7th)
- ◆ Job Growth: 66% (Ak 144%)
- ◆ Population Growth: 46th (Ak 5th)
- ◆ Median Age: 1st (Ak 49th)
- ◆ Housing Built Before 1939: 31% (Ak 2%)
- ◆ Median Paycheck: 77% as high as Alaska
- ◆ Projected Population Growth = 1/3 US average (Ak 30% above)

Comparing a Family of 4

 <p>Maine</p>		 <p>Alaska</p>
\$55,641	Wages	\$72,750
-\$7,077	State Taxes	\$0
\$0	Dividend	\$6,800
\$29,995	Public Spending	\$49,064
\$78,560	TOTAL	\$128,614
	Difference	+\$50,054

Actual Performance Since 1990: Jobs vs. Oil Production (Index: 1990 = 1)



- ◆ 104 thousand jobs added
- ◆ Production down 2/3

Explaining The Paradox

- ◆ Federal \$\$ and Military Expansion
- ◆ Tourism, Mining, Retirees, Air Cargo
- ◆ Petroleum Revenues
- ◆ National Economic Boom
- ◆ Increased Labor Intensity in Petroleum Industry
- ◆ Anticipation of Gas Line, OCS, etc.
- ◆ Support Sector Catching Up
- ◆ Wealth Accumulation

Wealth Creation



The Economic Future of Alaska: 50 Years of Statehood Has Not Changed the Challenges



Alaska Natural Resources: 2005 Market Value (Million \$)

◆ Oil	\$18,164
◆ Gas	\$ 761
◆ Mining	\$ 1,506
◆ Seafood	\$ 1,392
◆ Timber	\$ 142
◆ Tourism	\$ 1,592

Value determined at point of
production except for mining.



Petroleum Resources for a Sustainable Economic Future (Billion Barrels of Oil)

Production History:

North Slope	15.4
Cook Inlet	1.3

Reserves Today:

Central North Slope	5.9
Cook Inlet	.1

Potential Additional Reserves

(Technically Recoverable—USGS, MMS):

ANWR	10.4
NPRA	10.6
OCS	23
Central North Slope	4

Resource Curse: Some Symptoms



- ◆ Corruption
- ◆ Rent Seeking
- ◆ Entrepreneurial Decline
- ◆ Overheating Economy
- ◆ Economic Distortions
- ◆ Public Sector Overexpansion
- ◆ Mismanagement
- ◆ Underinvestment



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